STAFFORD COUNTY SCHOOL BOARD

Agenda Consideration

TOPIC: Revised Block Scheduling Evaluation Plan,

Selection of Study Group Participants, and

Options to Select an Outside Consultant

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Superintendent for Instruction & Technology

Chris Quinn, Ph.D.

Executive Director for Instructional Services

MEETING: December 13, 2005

ITEM NO: 13F

ACTION DATE: December 13, 2005 Assistant

ACTION REQUESTED BY THE SUPERINTENDENT:

That the Stafford County School Board receive information and take action on the plan and methodology that will be used to evaluate the hybrid block scheduling format used in three of the division's high schools, including the option of using an external consultant. The School Board is also asked to take action on the method of selecting at-large members of the evaluation study group.

KEY POINTS:

The School Board is requested to take action on the revised hybrid block evaluation plan that includes changes and additions from the public review meeting and the November School Board Meeting. These revisions include: 1.) measuring the degree of teacher collaboration based on survey data, 2.) adding five at-large participants to the study group process, 3.) analyzing entering and exiting transfer students' schedules according to the number of courses they were able to keep from the previous school or scheduled at the new school. 4.) using percentages instead of a count quantity in some of the compari-sons where applicable, 5.) making a specific comparison between SOL test results of hybrid block students who do not have academic courses in sequential semesters with students taking year-long courses in the non-block schools, 6.) evaluating subject-matter retention by analyzing the SOL scores of students with a two-semester lapse between sequential academic courses, and the scores of students who have had less than a two-semester lapse, and 7.) comparing the hybrid block schools to data from the 2004-05 school year, and adding more comparisons between the block and non-block schools during the 2005-08 school years. (Note: Revisions, changes, and additions to the original proposal presented to the School Board on October 12, 2005 in response to the public review are underlined in the attached document. Also, other additions based on suggestions from the November 15 School Board Meeting are indicated in blue.)

Also, the School Board is requested to take action on the method for selecting at-large participants of the division-wide study group if the School Board elects to continue with the internal evaluation plan. The following are two options:

- (1.) Parents and community members will be asked to submit applications to be selected as participants. Announcements for this application process will be made to the community by postings on the division website, school newsletters, and an advertisement in the local newspaper. The School Board will establish a process to review these applications and to select the at-large participants.
- (2.) The school leadership teams or advisory councils in the middle schools and non-block schools will submit applications for those interested in serving as at-large participants. A lottery process will be used to select four participants. The fifth participant, or community representative, will be selected by a lottery process from applications submitted in response to announcements on the website, in school newsletters, and in the local media.

In addition to an internal evaluation, the School Board has the option to contract for an evaluation plan to be developed and implemented under the auspices of an external consultant (see attached examples from Old Dominion University and Virginia

Commonwealth University). The School Board should take action on whether or not to contract with an external agency to conduct the evaluation of the implementation and effectiveness of the hybrid block scheduling format. A number of agencies have been contacted to explore the possibilities and the costs. If the School Board elects to contract with an external agency.

it is recommended that it forms a community committee to not only write a request for proposal but also evaluate the proposals. This community committee should be empowered to make a recommendation to the School Board as to which agency would conduct the evaluation of the hybrid block.

Finally, some notes and handouts from a session on secondary scheduling innovations at the Virginia Association for Supervision and Curriculum Development Annual Conference (November 30 through December 2, 2005) are attached.

SCHOOL BOARD GOAL:

Goal 1: Provide educational excellence through instruction that establishes high expectations for all students yet recognizes the unique needs of each learner.

FUNDING SOURCE: AUTHORIZATION REFERENCE:

Hybrid Block Scheduling Evaluation Plan

(revised: November 11 and 16, 2005)

Context:

The Stafford County Public Schools implemented a block scheduling format in three of the division's high schools at the beginning of the 2005-06 school year. The previous year the principals of the three schools provided leadership for investigating scheduling formats that would provide more opportunities for success for its students. The principals and the schools' school improvement committees reviewed the research literature, analyzed data, and assessed the needs of their high school students. The result of this study yielded a format that is largely based on classes of about 90 minutes with modifications for some specialized courses; therefore, this format is considered a hybrid of the alternating (i.e. – A/B) and the semester (i.e. – 4x4) block scheduling format. The hybrid format allows students to take advantage of the many positive attributes of the semester block schedule without compromising the year-long integrity of advanced placement and performing arts courses. Many courses offer a credit for a semester of work, but others run the entire year either on the basis of 45 minutes every day of the year or 90 minutes every other day. During the planning year significant attention was given to professional development, and a majority of the teachers received some training on the implementation of the block schedule, most commonly 1-10 hours, with a major emphasis on the use of student-centered instructional strategies.

During the planning year, the principals understood that planning would have to continue during the actual initial year of implementation. As a result, the original block scheduling implementation plan included continued professional development and support for teachers during the first year; as well as an evaluation component that would yield information to make needed alterations, adjustments, and improvements.

Purpose:

Over the past twenty-five years, significant educational research has emerged supporting the benefits of block scheduling and the successful implementation and maintenance of block scheduling throughout the country is well-documented. In fact, it could be maintained that block scheduling is the most significant re-

Note: Revisions, changes, and additions to the original proposal presented to the School Board on October 12, 2005 are underlined in this document. Also, other additions based on suggestions from the November 15 School Board Meeting are indicated in blue.

structuring and school improvement strategy that high schools have experienced in the history of high schools in our nation. Instead of being an alternate way of structuring the school day, block scheduling has become the norm in many states. In Virginia, 75 percent of the high schools use some form of block scheduling. In addition to the reported direct benefits for students, it establishes new possibilities for new and better ways for teachers to work together. With twenty-five percent of the teachers sharing a common planning time at any point during the school day, the establishment of a true culture of professional learning becomes a possibility. This kind of embedded professional learning always results in improved student achievement. All of the schools that are nationally recognized for closing the achievement gap have an established culture of professional learning within their schools.

Based on the findings from research studies during the year of planning conducted in the three high schools, these schools decided to change to block scheduling because of the following benefits:

- Students would have greater opportunity to take more courses and more options within the program (e.g. - more students could take AP courses, dual enrollment, and various electives).
- The needs of students could be better accommodated (e.g. some students could accelerate through the high school program by taking more rigorous academic courses in successive semesters, while students who fail courses can repeat them the next semester thereby staying on-track with his/her cohort to graduate in four years).
- The high school would become more personalized as teachers would have a fewer number of students each semester allowing them to give more individualized attention.
- With 90 minute classes, students would have more opportunities to engage in student-centered learning activities that require them to be active learners, instead of less effective teacher-centered instruction.
- Because of less activity in the halls and common areas in the school building during the school day due to fewer class changes, an improvement in school climate should be the result of improved student behavior. Concomitantly, student attendance should increase since students will realize that more content is covered each day.
- Due to more collaborative planning time, teachers should feel a greater sense of effectiveness and empowerment.

In summary, more opportunities, more flexibility, improvements in the school climate, better student-teacher interaction, and more effective instruction are the positive outcomes expected as a result of changing to block scheduling. The research clearly substantiates that each of these expected outcomes are correlates for indicators of student achievement such as more students taking higher-level courses, more students graduating, and higher standardized test results. This evaluation plan which focuses on the 2005-06 implementation of block scheduling will analyze separately each of these reasons for changing the scheduling format. The primary purpose of this evaluation is to determine to what degree the expected positive outcomes were realized during the first three years of implementation of the hybrid block scheduling format.

In addition, the review of student achievement as measured by test results will be a significant aspect of this evaluation. While higher student achievement as measured by test results has not been the principal catalyst for the scheduling change, a complimentary purpose of this evaluation is to analyze specific student academic measures (i.e. - SOL end-of-course results, SAT scores, advanced placement results and graduation rates), including analyzing subgroup data (i.e.- socio-economic status, demographics, and students with disabilities). In the context of the No Child Left Behind federal legislation, each school is accountable for its' student achievement test results every year. As a result, data will be available to compare student achievement test results of all the high schools in our division, both the block and the non-block schools.

Finally, an ancillary purpose will be to analyze some administrative practices related to the scheduling of students. Because of concerns related to retention of learning, SOL test results of students who have a two semester lapse in time between sequential academic courses will be compared with other students who have not had such a lapse in time. It will take two years to make this comparison in the block schools. Other scheduling practices associated with transfer students will be analyzed. For these transfer students, the number of courses that our hybrid block schools were not able to accommodate will be reported. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if transfer students in block schools have less or more incidences of not being able to provide the same courses that the students were enrolled in in their previous schools. In addition, in order to gauge the impact of the hybrid block schedule on students who exit the school division. a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.

Evaluation Methods:

The Executive Director of Instruction and his staff will examine the following variables to determine the outcomes, results and effects of the hybrid block scheduling format:

- 1. Student academic success will be compared by analyzing the following indicators: SOL end-of-course test results, SAT scores, advanced placement results, credits earned, grade promotion rates, graduation rates, and the percentage of students entering two- and four-year colleges. A specific student achievement focus will be the percentage of students scoring at the highly proficient level on SOL end-of -course tests in the years 2004-05 and 2005-06 in the block schools. In addition, each of the NCLB subgroups will be compared.
- 2. Academic opportunities including course offerings and course enrollment. The enrollment in advanced placement courses will be a focus.
- 3. In order to determine if there are any negative effects for students who may be scheduled in sequential academic courses with a two semester lapse in time, the SOL end-of-course tests results of these students will be compared with other students who are scheduled in sequential academic courses with less than a two semester lapse in time. (This data will not be available until the fall of 2007 and may be immaterial because the school administrations would have mechanisms in place to prevent a two semester lapse from occurring in any significant numbers.)
- 4. Analysis of the degree of course accommodation for students transferring in to our schools. In order to determine the degree to which students transferring in to our schools are able to receive the same courses as they had in their previous schools, each counselor will keep records listing the student's name and the courses which the school was not able to accommodate or transfer. A comparison will be made between the hybrid block schools and the non-block schools. An "accommodation index" will be computed for both block and non-block schools.
- 5. Analysis of the ability of other schools to accommodate courses from the hybrid block for students transferring from our schools. In order to gauge the impact of the hybrid block schedule on students who exit the school division, a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.
- 6. Student behavioral success will be compared by examining attendance, suspension rates, and discipline referrals.
- 7. Analysis of specific quality standards (i.e. teacher daily course enrollment load, number of teacher preparations per semester, and class size averages).

- 8. General satisfaction will be determined through surveying administrators, teachers, students, and parents.
- 9. The quality of classroom instruction will be measured through a best practices audit in which a team of central office curriculum specialists will conduct classroom observations.
- 10. An analysis will be made of the degree of professional collaboration within the staffs at each school. Survey data will be used to determine teachers' perceptions about the level of collaboration.

The evaluation design consists of the collection of data from a variety of departments and data sources including the student information management system under the auspices of the Department of Technology (i.e. - student enrollment, course enrollments, grades, credits earned, promotion rates, graduation rates, suspension rates, discipline referrals, attendance data, and state and national test results). Other data will be collected from the schools. The Executive Director of Accountability will work closely with this evaluation to ensure that all the analyses are conducted with validity and reliability. The survey instruments will be completed by administrators, teachers, students, and parents. The objective of the survey is to give substantial feedback regarding the relative merits of the block schedule versus the traditional schedule regarding academic opportunities, student-teacher interaction, school climate, student behavior, instructional quality, and overall satisfaction. Statistical tests for differences and levels of significance are not possible with the survey results since a true scientific research design is not the purpose of this evaluation.

Limitations:

There are certain limitations that will be inherent in the evaluation of the 2005-06 hybrid block scheduling format. Some complicating factors exist. First, because of redistricting of students at the beginning of the 2005-06 school year, a comparison of achievement data from the previous year must be considered with some caution because of changes in the student populations at each of the schools. Second, since Mountain View High School is in its first year, there will be no data available to make a comparison to the traditional schedule. Third, the first year of any innovative program may provide irregular results due to implementation challenges. Classes 90 minutes in length are a totally new experience for teachers and students. Even with explicit training and support for changes in classroom instruction methodology in the planning year and during the implementation year, it would be unfair to assess the impact of such a major instructional innovation based on an evaluation of the first year alone. Successfully implementing a major change generally takes several years. While a formative evaluation for the 2005-06 school year can be reported in the fall of 2006, it is recommended that the evaluation of the hybrid block scheduling format should be extended to include a summative evaluation after three years.

<u>Interim</u> Evaluative Reports, Accountability and Involvement:

Even though there are some precautions that must be considered when attributing outcomes to the implementation of block scheduling, it is necessary to employ evaluative measures not only because accountability requires it but also because improvements will not be possible unless data is used as a guide; therefore, formative evaluation will be a key aspect of the total evaluation process. In addition to the formative evaluation that will be reported to the Board of Education in the fall of 2006, interim updates on the evaluation process will be made during the 2005-06 school year. Sometime after the end of the first semester, it would be reasonable to make some preliminary first semester comparisons between block scheduling and the traditional schedule from the previous year. For example, course enrollments, courses offered, attendance data, and suspension data can be compared. Since school would have been in session the same number of days, this would be an essentially equivalent comparison. It would also make sense to compare passing rates at the end of first nine weeks under the block schedule for semester length courses with passing rates at the end of the first semester last year under the traditional schedule.

In addition to the School Board, some other groups will be asked to be involved in the evaluation of the implementation of block scheduling. In each of the schools, the principals will establish a school advisory council that will be charged with focusing on student achievement and school improvement including curriculum program goals and priorities. The evaluation of block scheduling will be only one responsibility of the school advisory council. The school advisory council will consist of the principal as chairman; and teacher, parent, and/or business representatives. The principals may use or adapt some existing school group that includes some parent members to serve as the school advisory council.

The school advisory council will appoint a block scheduling study group for the purpose of reviewing information, data, and results that are provided by the block scheduling evaluation process. The study group's only responsibility will be associated with the evaluation of the implementation of the hybrid block scheduling format. The study group will include six members including one teacher, three parents, one student., and one member of the school advisory council (excluding the principal). In addition to these eighteen participants, five at-large participants will be selected to join the process. The at-large participants will include the following: a middle school parent, a middle school teacher, a parent from each of the non-block schools, and a community member. A process for selecting the at-large participants will be developed by the School Board and Superintendent. The Executive Director of Instruction and the Executive Director of Accountability will meet with the study groups and the atlarge participants to provide evaluative data and to provide assistance in

understanding the results. In addition, these twenty-three participants will work together to develop the teacher, student, and parent survey instruments, as well as the administration of these surveys and the interpretation of the results. The study groups will report back to the schools' principals and the school advisory councils from time to time.

Formative and Summative Evaluations:

Since comprehensive, complete data for the 2005-06 school year will not be available until September 2006, a summative evaluation report focused on the 2005-06 implementation of the hybrid block scheduling format can not be made until October 2006. Three categories of data will be used in this evaluation. First, there will be some data that represents correlates of student achievement. Second, other data will represent student achievement measures. Third, other data will be analyzed associated with scheduling administrative practices. These three categories of data include the following measures:

STUDENT ACHIEVEMENT CORRELATES

- Number and percentage of students in advanced placement, dual enrollment, and various electives in 2005-08 compared to 2004-05 in the block schools, and to 2005-08 in the non-block schools.
- Number and percentage of survey responses on the student, teacher, and parent surveys that indicate the teacher-student relationship is more personalized in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Number and percentage of students on teacher rolls each semester in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The average class size in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Based on the best practices audit in each school, the use of studentcentered instructional activities in the block schools will be reported along with the teacher responses to a survey item related to their use of studentcentered activities.
- Attendance rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Suspension rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- <u>Number</u> and percentage <u>of discipline referrals in 2005-08 compared to 2004-5 in the block schools and to 2005-08 in the non-block schools.</u>
- Number of survey responses on the teacher survey that indicate that the degree of collaboration is greater in 2005-08 compared to 2004-05 in the block schools

STUDENT ACHIEVEMENT MEASURES

- Student achievement results on SOL tests in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools. Also, a specific comparison will be made between SOL test results of hybrid block students who do not have academic courses in sequential semesters with students taking year-long courses in the non-block schools.
- Student achievement results on Advanced Placement tests in 2005-08
 compared to 2004-05 in the block schools and to 2005-08 in the non-block
 schools.
- Student achievement results on the SAT in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The percentage of students scoring at the highly proficient level on SOL end-of -course tests in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The graduation rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The promotion rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.

ADMINISTRATIVE SCHEDULING PRACTICES

- SOL test results of students who have had a two semester lapse in time between sequential academic courses will be compared with other students who have not had such a lapse in time. It will take two years to make this comparison in the block schools.
- For transfer students entering our schools, the number of courses that the schools were not able to accommodate will be reported. A comparison will be made between the block and non-block schools during the 2005-06 school year.
- For transfer students leaving our schools, an attempt will be made to gather data related to the number of courses that the new school was not able to accommodate. A survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.

In conclusion, more opportunities, more flexibility, improvements in the school climate, better student-teacher interaction, and more effective instruction are the positive outcomes expected as a result of changing to the hybrid block schedule. The primary purpose of this evaluation is to determine the extent to which these expected outcomes are realized. In addition, a complimentary objective is to compare student achievement data as measured by graduation rates, promotion rates, and standardized tests. Another objective is to determine the effects of student scheduling practices. A formative evaluation will be made in the fall of

2006 and 2007 with the summative evaluation being presented to the School Board and Superintendent in the fall of 2008.

EVALUATION DESIGN

STUDENT ACHIEVEMENT CORRELATES OR EXPECTED OUTCOMES	EVALUATION MEASURES	TIMELINE
Students would have greater opportunity to take more courses and more options within the program (e.g more students could take AP courses, dual enrollment, and various electives).	Comparative analysis of student information database and course enrollments (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools)	Winter 2006Fall 2006Fall 2007Fall 2008
The needs of students could be better accommodated (e.g some students could accelerate through the high school program by taking more rigorous academic courses in successive semesters, while students who fail courses can repeat them the next semester thereby staying on-track with his/her cohort to graduate in four years).	 Comparative analysis of course enrollments (2005-08 block v. 2004-05 traditional) Comparative analysis of promotion and graduation rates (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools) 	Winter 2006Fall 2006Fall 2007Fall 2008
The high school would become more personalized as teachers would have a fewer number of students each semester allowing them to give more individualized attention.	 Analysis of online survey results Comparative analysis of daily course enrollment load for teachers and class sizes (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools) 	Fall 2006Fall 2007Fall 2008
With 90 minute classes, students would have more opportunities to engage in student-centered learning activities, instead of less effective teacher-centered instruction.	 Analysis of best practices audit Analysis of online survey results Comparative analysis of number of teacher preparations each semester (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools) 	Fall 2006Fall 2007Fall 2008
Because of less activity in the halls and common areas in the school building during the school day due to fewer class changes, an improvement in school climate should be the result of improved student behavior. Concomitantly, student attendance should increase since students will realize that more content is covered each day.	Comparative analysis of attendance, suspension rates and discipline referrals (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools)	Fall 2006Fall 2007Fall 2008
Due to more collaborative planning time, teachers should feel a greater sense of effectiveness and empowerment.	Analysis of online survey results (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools)	Fall 2006Fall 2007Fall 2008

EVALUATION DESIGN

STUDENT ACHIEVEMENT MEASURES	EVALUATION MEASURES	TIMELINE
Student achievement results on SOL tests	Comparative analysis of SOL results using NCLB subgroups (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block schools). Also, hybrid block students with a semester lapse in sequential courses with non-block students with year-long courses (2005-08 block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
Student achievement results on AP test	Comparative analysis of AP (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
Student achievement results on SAT test	Comparative analysis of SAT (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	Fall 2006Fall 2007Fall 2008
The percentage of students scoring at the highly proficient level on SOL end-of -course tests	Comparative analysis of highly proficient SOL results (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	Fall 2006Fall 2007Fall 2008
Graduation rates	Comparative analysis of graduation rates (2005-08 block v. 2004-05 traditional, and 2005- 08 block v. non-block)	 Fall 2006 Fall 2007 Fall 2008
Promotion rates	Comparative analysis of promotion rates (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	Fall 2006Fall 2007Fall 2008

EVALUATION DESIGN

ADMINISTRATIVE SCHEDULING PRACTICES	EVALUATION MEASURES	TIMELINE
SOL test results of students who have had a two semester lapse in time between sequential academic courses and other students who have not had such a lapse in time	Comparative analysis of SOL test scores of students with two semester lapse in time between sequential academic courses and other students who have had less that a two semester lapse (2005-07, and 08 within block school comparison)	• Fall 2007 • Fall 2008
For transfer students, the number of courses that the block schools and non-block schools were not able to accommodate to determine if block schools have a higher rate of not being able to give transfer students the same courses as they had in their previous schools	Comparative analysis of number of courses that transfer students were not able to keep from their previous schools (block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
In order to gauge the impact of the hybrid block schedule on students who exit the school division, a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.	Comparative analysis of number of courses that the new school was not able to schedule for the students transferring from the hybrid block schools. (block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008

EXAMPLE DRAFT

Teacher Opinions: Hybrid Block Schedule Implementation

Please circle whether you "strongly agree" (SA), "agree" (A), "no change" (N), "disagree" (D), "strongly disagree" (SD) or "no opinion" (0) with the statements below.

When I compare the block schedule to the traditional seven-period day. I find that ...

SA A N D SD 0	1.	Block scheduling has allowed me to increase my use of a variety of instructional practices.
SA A N D SD 0	2.	Block classes provide enough time for each individual student to learn.
SA A N D SD 0	3.	Block scheduling has allowed me to increase individualization of instruction.
SA A N D SD 0	4.	Block classes allow me to complete the learning cycle in an individual class section.
SA A N D SD 0	5.	Block classes reduce time lost to instruction.
SA A N D SD 0	6.	Block scheduling has improved student attendance.
SA A N D SD 0	7.	Block scheduling has decreased the dropout rate.
SA A N D SD 0	8.	Block scheduling has reduced discipline incidents.
SA A N D SD 0	9.	Block scheduling has improved student grades.
SA A N D SD 0	10.	Block scheduling has improved AP scores.
SA A N D SD 0	11.	Block scheduling has increased dual enrollment.
SA A N D SD 0	12.	Block scheduling has reduced my daily preparations.
SAANDSD0	13.	Block scheduling has reduced the number of students I work with daily.
SA A N D SD 0	14.	Block scheduling has increased the number of classes I teach annually.
SA A N D SD 0	15.	Block scheduling has reduced student homework loads.
SA A N D SD 0	16.	Block scheduling has increased the number of credits students earn.
SA A N D SD 0	17.	Block scheduling has increased the opportunity for students to re-take
		failed courses.
SA A N D SD 0	18.	In-service on active learning strategies is very important for proper implementation
SA A N D SD 0	19.	of block scheduling. Block scheduling has decreased student/teacher ratios.
SAANDSD0	20.	Block scheduling has had a negative impact on student learning in
CATALL OF C	20.	sequential classes such as foreign language and math.
SAANDSD0	21.	Block scheduling has had a negative impact on visual and performing arts classes
0,1,1112 02 0		(music, art, drama).
SA A N D SD 0	22.	Block scheduling has increased the problems associated with transfer
		students.
SA A N D SD 0	23.	Block scheduling has made it harder for students to complete make-up work.
SA A N D SD 0	24.	Block scheduling reduces rates of student retention of information.
SA A N D SD 0	25.	Block scheduling has led to an increase in student boredom.
SA A N D SD 0	26.	Block scheduling has increased the problems associated with the
		use of substitute teachers.

Block scheduling has helped students focus more on earning credits

SAANDSD0 27.

SAANDSD0 SAANDSD0 SAANDSD0	28. 29. 30.	towards graduation. My instruction has improved as a result of block scheduling. Block scheduling has improved student learning. I prefer block scheduling to the traditional seven period day.
SAANDSD0	31.	Block scheduling has improved the quality of student/teacher relationships.
	32.	The BEST thing about block scheduling compared to the traditional seven-period schedule is:
	33.	The WORST thing about block scheduling compared to the traditional seven-period schedule is:
	34.	Are there issues concerning the impact of the block schedule on the school which are not reflected in this survey? If so, what are they?

A Learning-Centered Framework for Whole Project Evaluation of Block Scheduling

A Talking Paper Prepared for Stafford County Public Schools

By Old Dominion University's Program for Research and Evaluation in Public Schools

December 2, 2005

Teaching and learning projects are ultimately concerned with student outcomes; i.e., student achievement. Unfortunately, most district approaches to program selection do not take into account what it takes to successfully adopt, modify, implement, evaluate and sustain a program over time that optimizes student performance. Marzano says, "Educators do well with most first order change but not second order change." First order change involving simple innovation uses existing building beliefs and values. Second order change requires a change in beliefs and values (Marzano, Balanced Leadership, 2000). Block scheduling is second order change that requires building reculturing. Gaskey and Queen find that while a majority of educators using block schedules remain loyal to the basic tenets of the model, some principals have limited understanding of the science of scheduling and lack specific skills in *evaluating* effective teaching practices (Block Scheduling Revisited, Gaskey and Queen, 2000).

The suggested framework (Table 1) guides educators in their use of program adoption, development, testing and evaluation. It is a practical, nonprescriptive tool, designed to summarize and organize essential elements of program evaluation.

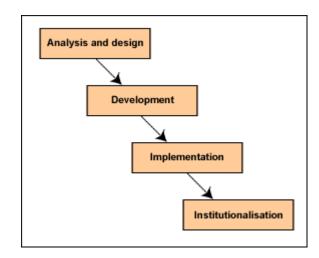


Table 1 – A Four Phase Education Evaluation

The framework could contain a number of foci for evaluation, e.g., the district evaluation as well as internal and external research, development and test of an intervention (s), efficacy, scaling (block scheduling for the remaining two high schools), convergence of resources, and finally institutionalization. Each phase would contribute to overall evaluation and to the key goals of the district over time.

There is a clear purpose and set of evaluation questions for each focal point. The questions will shape the type of evidence, and evidence gathering techniques. The questions will also determine the cost of the evaluation.

Informal evaluation strategies may be adequate for ongoing program assessment. However, when the stakes of potential decisions or program changes increase, employing evaluation procedures that are

explicit, formal, and justifiable becomes important. Understanding the logic, reasoning, and values of evaluation that are reflected in this framework can lead to lasting impacts, such as basing decisions on systematic judgments instead of unfounded assumptions.

The framework will provide a systematic approach for answering questions such as:

- 1) What will be evaluated? (i.e., what is the "program" (block scheduling) and in what context does it exist?)
- 2) What aspects of the program will be considered when judging program performance?
- 3) What standards (i.e., type or level of performance) must be reached for the program to be considered a success?
- 4) What evidence will be used to indicate how the program has performed?
- 5) What conclusions regarding program performance are justified by comparing the available evidence to the selected standards?
- 6) How will the lessons learned from the inquiry be used to improve student performance (scaling block scheduling to the two remaining high schools)?

In summary, the framework guides public education professionals in their use of program evaluation. It is a practical, nonprescriptive tool, designed to summarize and organize essential elements of program evaluation. The framework comprises **steps** in program evaluation practice and **standards** for effective program evaluation (Table 2). Adhering to the steps and standards of this framework will allow an understanding of each program's context and will improve how program evaluations are conceived and conducted.

The following table summarizes the **steps** in program evaluation practice with the most important subpoints for each, as well as the **standards** that govern effective program evaluation.

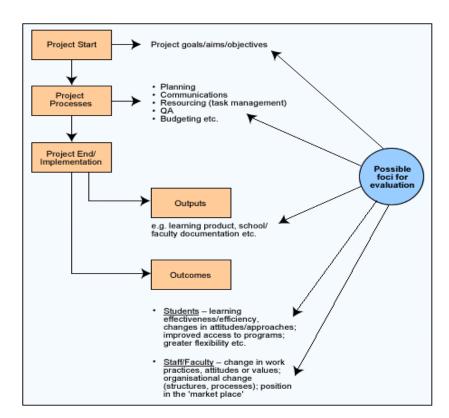


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Possible Evaluation Plans

High quality program evaluation helps to determine the effectiveness, efficiency, and equity of particular programs and a design-based (Brown, 1992; Collins, 1992), mixed-methods approach is best suited to the Stafford County Block Schedule Evaluation. It has been argued that randomized experimental designs are the "gold standard" of educational research, and while within the right conditions, this methodology can be valuable, it is fraught with limitations in educational settings. Design-based research, which blends empirical educational research with the theory-driven design of learning environments, is an important methodology for understanding how, when, and why educational innovations work in practice.

Research questions derived from ongoing deliberations among researchers, practitioners and policymakers have the potential of bridging the gap between theory and practice. Our research questions will be developed in partnership with Stafford County stakeholders but could include:

- 1. How successful was Stafford County in the implementation of block scheduling in terms of:
 - a. Planning:
 - b. Communication with schools, students, parents and other stakeholders;
 - c. Effectively utilizing district resources;
 - d. Ensuring that the implementation was correctly implemented; and
 - e. Maintaining the proposed budget?
- 2. Where the outputs created by Stafford County to guide the transition to block scheduling adequate in terms of:
 - a. Materials;
 - b. Professional development; and
 - c. Parent preparation?
- 3. What were the outcomes associated with block scheduling in terms of:
 - a. Student satisfaction;
 - b. Student achievement:
 - c. Faculty satisfaction; and
 - d. Parent satisfaction?
- 4. How do student outcomes in block scheduled schools differ from those in non-block scheduled schools in terms of:
 - a. Student satisfaction; and
 - b. Student academic achievement?

To address these questions the evaluation would employ a design-based mixed methods approach that synthesized a number of data sources including surveys, interviews, site visits and school records/data.

Proposed Data Collection Methods and Subjects

Most data collection will be conducted with ALL subjects connected to Stafford County high school education systems so that we can compare sentiments concerning block and non-block scheduling.

Table 3. Proposed Da	sed Data Collection Plan		
Collection Method	Subject and Purpose		
_			
Surveys	Teachers		
	To assess levels of job satisfaction and teaching efficacy.		
	To determine satisfaction with professional development activities.		
	Parents		
	To assess levels of satisfaction with educational service.		
	Students		
	To assess levels of satisfaction with educational experience.		
	Administrators		
	To determine levels of satisfaction with education service delivery.		
Interviews	Students		
	Focus Groups to assess student sentiments about the delivery of education services.		
	Administrators		
	To assess the schedule and efficacy of implementation.		
	Teachers		
	To assess the schedule and efficacy of implementation.		
	Parents/Stakeholders		
	To assess the schedule and efficacy of implementation.		

Site Visits	Professional Development Activities
	To assess the content and quality of professional development delivery
	Classrooms
	To assess the authentic reform in instruction.
Student Data	Virginia Standard of Learning Assessment Scores
	To determine the impact of block scheduling activities on student achievement

Formative Evaluation

The evaluation plan would incorporate a formative data collection and analysis component in which evaluators will collect and interpret data in an ongoing formative cycle that will inform practitioners of program strengths and weaknesses. For example, we will visit each professional development activity and give program developers feedback concerning the content and delivery. In this way evaluation serves as a continuous quality improvement model which uses ongoing data collection derived from authentic research settings to improve design features of the program, improve student performance, sustain program strengths while mitigating weaknesses, address contextual nuances of individual settings, maximize gain through refinement and continuous improvement, sustain efforts over time, and disseminate successes to other programs.

Summative Evaluation

Ultimately, the education community is concerned with what does and does not work in terms of student achievement. We would incorporate a scientifically based, rigorous evaluation design to determine if the Stafford Block Scheduling program has an impact on student. Specifically, we propose a pre/post-program design with matched pair comparisons of non-equivalent treatment and control groups. This is a quasi-experimental approach that approaches the 'gold standard' of randomization of treatment and control groups and is accepted by the U.S. Department of Education's Institute for Education Services (IES) for their clearinghouse *What Works In Education*. Students who receive the treatment of block scheduling will be matched with other students in the non-block scheduled schools who share similar characteristics that may affect student outcomes such as: initial test scores, grade level, race and gender. We will then analyze the pre-and post-treatment period SOL scores for the students taught in treatment and control environments using the analysis of covariance (ANCOVA) statistical method. By holding constant variables that are likely to affect student achievement for both the treatment and control groups, we are measuring the change in student achievement that may be attributed to the Stafford Block Scheduling activities. Absent random assignment of students to high schools, a matched comparison design is the most rigorous approach for determining impact on student achievement.

Evaluation Options and Costs

Stafford County may elect to conduct only portions of the evaluation depending on their selected evaluation foci. Below are some suggested options for the evaluation design and the estimated costs per year.

Table 4. Evaluation Options and Estimated Costs				
Option 1: \$35,500/year	Option 2: \$71,000/year	Option 3: \$143,500/year	Option 4: \$193,500/year	
Student Academic	Student Academic	Student Academic	Student Academic	
Achievement Outcomes	Achievement Outcomes	Achievement Outcomes	Achievement Outcomes	
Comparison: Matched-pair	Comparison: Matched-	Comparison: Matched-pair	Comparison: Matched-pair	
comparison of blocked and	pair comparison of blocked	comparison of blocked and	comparison of blocked and	
non-blocked student SOL	and non-blocked student	non-blocked student SOL	non-blocked student SOL	
scores.	SOL scores.	scores.	scores.	
	Participant Satisfaction:	Participant Satisfaction:	Participant Satisfaction:	
	Surveys of populations to	Surveys of populations to	Surveys of populations to	
	assess satisfaction with	assess satisfaction with	assess satisfaction with	
	implementation.	implementation.	implementation.	
		Implementation	Implementation	
		Assessment: Interviews of	Assessment: Interviews of	
		participants to determine	participants to determine	
		implementation efficacy and	implementation efficacy and	
		efficiency. Review	efficiency. Review	
		materials/professional	materials/professional	
		development activities.	development activities.	
		Determine adherence to	Determine adherence to	
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			Formative Suggestions:	
			Based on ongoing review of	
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			professional development	
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A Learning-Centered Framework for Whole Project Evaluation of Block Scheduling

A Talking Paper Prepared for Stafford County Public Schools

By Old Dominion University's Program for Research and Evaluation in Public Schools

December 2, 2005

Teaching and learning projects are ultimately concerned with student outcomes; i.e., student achievement. Unfortunately, most district approaches to program selection do not take into account what it takes to successfully adopt, modify, implement, evaluate and sustain a program over time that optimizes student performance. Marzano says, "Educators do well with most first order change but not second order change." First order change involving simple innovation uses existing building beliefs and values. Second order change requires a change in beliefs and values (Marzano, Balanced Leadership, 2000). Block scheduling is second order change that requires building reculturing. Gaskey and Queen find that while a majority of educators using block schedules remain loyal to the basic tenets of the model, some principals have limited understanding of the science of scheduling and lack specific skills in *evaluating* effective teaching practices (Block Scheduling Revisited, Gaskey and Queen, 2000).

The suggested framework (Table 1) guides educators in their use of program adoption, development, testing and evaluation. It is a practical, nonprescriptive tool, designed to summarize and organize essential elements of program evaluation.

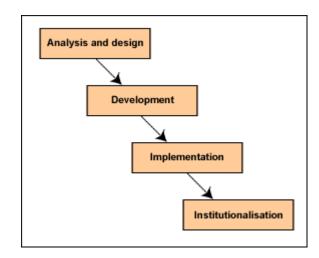


Table 1 – A Four Phase Education Evaluation

The framework could contain a number of foci for evaluation, e.g., the district evaluation as well as internal and external research, development and test of an intervention (s), efficacy, scaling (block scheduling for the remaining two high schools), convergence of resources, and finally institutionalization. Each phase would contribute to overall evaluation and to the key goals of the district over time.

There is a clear purpose and set of evaluation questions for each focal point. The questions will shape the type of evidence, and evidence gathering techniques. The questions will also determine the cost of the evaluation.

Informal evaluation strategies may be adequate for ongoing program assessment. However, when the stakes of potential decisions or program changes increase, employing evaluation procedures that are

explicit, formal, and justifiable becomes important. Understanding the logic, reasoning, and values of evaluation that are reflected in this framework can lead to lasting impacts, such as basing decisions on systematic judgments instead of unfounded assumptions.

The framework will provide a systematic approach for answering questions such as:

- 1) What will be evaluated? (i.e., what is the "program" (block scheduling) and in what context does it exist?)
- 2) What aspects of the program will be considered when judging program performance?
- 3) What standards (i.e., type or level of performance) must be reached for the program to be considered a success?
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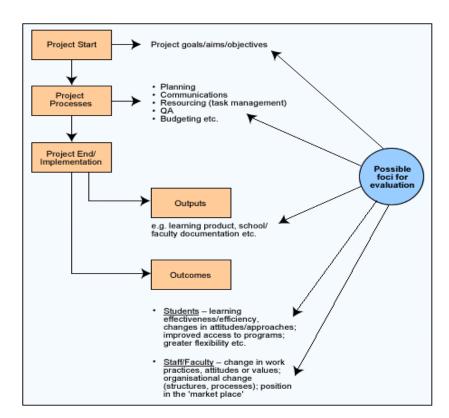


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E-mail received from Dr. Jim McMillan (12/05/05)

Virginia Commonwealth University Department of Foundations

Chris, I have had an opportunity to review the material you sent to me. I applaud your efforts to make the evaluation sound - only then will the findings result in improvements in student learning. Given that review and what we discussed by phone it doesn't seem to me that you need a major evaluation effort by an external party. You obviously have been thinking a lot about evaluation and have some good plans for what is needed. One challenge you will face will be to synthesize the sheer amount of data generated.

I am prepared to offer my services as director of a technical advisory committee (TAC) of three individuals that could provide an external review of evaluation plans, processes, and reports. The group would meet at least once a year in Stafford and otherwise communicate electronically. You could, if you wanted, identify one member of the technical advisory committee; I would be a second member and I would select another evaluation "expert" from Virginia as the third individual on the team.

The TAC would engage in the following activities:

- 1) review all evaluation plans, suggest improvements (e.g., as we discussed, add additional years of data to provide a more stable baseline), and verify that appropriate high quality, unbiased procedures are being used to answer important questions.
- 2) review psychometric procedures that address validity, reliability, and fairness.
- 3) review results and comment on appropriate interpretations and conclusions, focusing on practical as well as statistical significance.
- 4) review suggested changes to the evaluation as a result of formative data.
- 5) meet with evaluators and school division personnel to assure adequate understanding of the block scheduling that has been implemented and evaluation procedures.
- 6) meet with school division and school board members to present results of TAC reviews and recommendations.

If you are unable to fund a three member committee, I can serve in this role by myself.

The TAC would operate under the auspices of the Metropolitan Educational Research Consortium (MERC). MERC is a 15-year partnership between VCU and seven Richmond area school divisions that conducts and disseminates action and applied research. MERC personnel have been involved in many program evaluations.

The TAC would make a three-year commitment to Stafford Schools. The resources needed to support the TAC are summarized below:

Personnel:

Chair, 10 days per year @ \$800 per day x 3 years: \$24,000 Members, 6 days per year per member @\$600 per day x 3 years: \$21,600

Travel: Auto mileage, hotel, meals: \$1,000 per year estimated

Please let me know if you have any questions. A more detailed letter of agreement would be prepared to establish a contract between myself and Stafford. This would involve a trip to Stafford and payment for one day of services, whether or not a final letter of agreement is signed.

I have attached my vita if that would be helpful.

Best, Jim